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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,851	08/03/2001	Gary K. Michelson	101.0084-02000	8299

22882 7590 10/29/2002

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EXAMINER	
SNOW, BRUCE EDWARD	
ART UNIT	PAPER NUMBER
3738	

DATE MAILED: 10/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	S1	
09/921,851		MICHELSON, GARY K.
Examiner	Art Unit	
Bruce E Snow	3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### **Status**

1) Responsive to communication(s) filed on \_\_\_\_.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### **Disposition of Claims**

4) Claim(s) 121-130 and 203-210 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 121-130 and 203-210 is/are rejected.

7) Claim(s) \_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

### **Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### **Attachment(s)**

1) Notice of References Cited (PTO-892)  
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_.  
5) Notice of Informal Patent Application (PTO-152)  
6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The following claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 204, 208 and 210, what is "genes coding"?

Regarding claims 205 and 209, referring to the drawings and specification, what is applicant's chamber and openings?

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

The claimed invention is directed to non-statutory subject matter. Claims 204, 208 and 210, "bone" is a naturally occurring substance which cannot be claimed.

### ***Claim Rejections - 35 USC § 102***

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 121, 124-126, 129-130, 203-210 are rejected under 35 U.S.C. 102(e) as being anticipated by Paul et al (6,258,125).

Paul et al teaches a spinal implant comprising a plurality of surface projections described as pyramid-shaped as shown in figures 4-7, for example. A pyramid shape has a forward facet, rearward facet, and two side facets. The upper and lower surfaces of the implant are curved in a side view and are angled relative to each other. Due to said curved upper and lower surfaces, some of the engaging structures have a forward facing facet that is longer than a rearward facing facet; and said rearward facing facet has a steeper slope relative to a upper or lower. Further note, figures 9-11 which show the structures can be angled; it is the Examiner's position that figures 9 and 10A show an angled pyramid-shape.

Regarding claim 126 wherein the side facets are in a plane at an angle to the longitudinal axis of the implant, can be interpreted many ways, for example the longest line is between diagonal corners of the implant and is therefore the longitudinal axis. The Examiner suggests defining the side facets relative to each other.

Regarding an opening, see figure 9 or elements 64.

Figure 9 can be interpreted as an opening or chamber.

Claims 121, 124-126, 129-130, 203-210 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsitsopoulos (WO 98/58604).

Tsitsopoulos teaches a spinal implant comprising a plurality of surface projections 4 comprising a forward facet, rearward facet, and two side facets. Said forward facet is longer than said rearward facet; and said rearward facets having a steeper slope relative to a upper or lower.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 122-123 and 127-128 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paul et al (6,258,125) or Tsitsopoulos (WO 98/58604).

Paul and Tsitsopoulos disclose the spinal implants as described above. However, they fail to teach any method of forming an implant. It would be obvious to one having ordinary skill in the art to cast the metal implant of Paul or Tsitsopoulos as a well known method of forming a metal. Further, it would be obvious to grind or use a similar process on the cast implant to form to a final product. Lacking any criticality in the specification the use of any one process is believed to be an obvious matter of design choice.

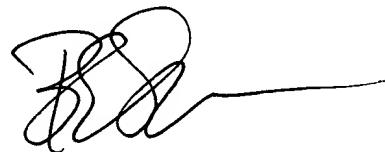
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce E Snow whose telephone number is (703) 308-3255. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (703)308-2111. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

bes  
October 25, 2002



BRUCE SNOW  
PRIMARY EXAMINER